

WHAT IS CLAIMED IS;

1. A protein composed of SEQ ID No. 1 or SEQ ID No. 2 characterized by having a nature to interact with proteasome.
2. A protein composed of SEQ ID No. 1 or SEQ ID No. 2 characterized by having a nature to interact with a polyubiquitin chain.
3. A therapeutic agent for disuse muscular atrophy characterized in that an expression or a function of a protein composed of SEQ ID No. 1 or SEQ ID No. 2 is inhibited.
4. A therapeutic agent for disuse muscular atrophy characterized in that an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and proteasome is inhibited.
5. A therapeutic agent for disuse muscular atrophy characterized in that an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain is inhibited.
6. Use of an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and proteasome for producing a therapeutic

agent for disuse muscular atrophy.

7. A method for screening therapeutic agents for disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and proteasome.

8. A marker for disease diagnosis for disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and proteasome.

9. A method for evaluating the risk of onset of disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and proteasome.

10. Use of an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain for producing a therapeutic agent for disuse muscular atrophy.

11. A method for screening therapeutic agents for disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain.

12. A marker for disease diagnosis for disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain.

13. A method for evaluating the risk of onset of disuse muscular atrophy characterized by utilizing an interaction between a protein composed of SEQ ID No. 1 or SEQ ID No. 2 and a polyubiquitin chain.